

CLAIMS

1. A mobile transceiver having:
- 2 a system for generation of position information and
means for transmitting said position information.
2. The invention of Claim 1 wherein said system for generation of position
2 information includes means for receiving a signal from a satellite.
3. The invention of Claim 2 wherein said system for generation of position
2 information includes means for receiving a Global Positioning System signal.
4. The invention of Claim 1 wherein said system for generation of position
2 information includes means for receiving a signal from an airborne platform.
5. The invention of Claim 1 wherein said means for transmitting said position
2 information includes a CDMA transmitter.
6. A base station having:
- 2 means for receiving position information from a remote unit and providing a
received position signal in response thereto and
- 4 means for directing a beam in response to said received position signal.
7. The invention of Claim 6 wherein said position information is provided at
2 least in part by a Global Positioning System.
8. The invention of Claim 7 wherein said remote unit is a mobile transceiver.
9. The invention of Claim 8 wherein said mobile transceiver is a CDMA
2 transceiver.

10. The invention of Claim 8 wherein said beam is directed to said transceiver.

11. The invention of Claim 6 wherein said means for directing a beam
2 includes a smart antenna.

12. The invention of Claim 11 wherein said means for directing a beam
2 includes an antenna array.

13. The invention of Claim 12 further including means for driving said array
2 to output a directed beam.

14. The invention of Claim 13 wherein said means for driving includes a
2 beamforming network.

15. A cellular communications system comprising:
2 a mobile transceiver having:
a GPS system for generation of position information and
4 means for transmitting said position information and
a base station having:
6 means for receiving said position information and providing a
received position signal in response thereto and
8 means located at said base station for directing a beam in response to
said received position signal.

16. The invention of Claim 15 wherein said GPS system is GPS assisted.

17. The invention of Claim 15 wherein said means for directing a beam
2 includes a smart antenna.

18. The invention of Claim 17 wherein said means for directing a beam

2 includes an antenna array.

19. The invention of Claim 18 further including means for driving said array
2 to output a directed beam.

20. The invention of Claim 19 wherein said means for driving includes a
2 beamforming network.

21. A method for effecting directional cellular communications including the
2 steps of:
generating position information at a mobile transceiver;
4 transmitting said position information;
means for receiving said position information at a base station and providing a
6 received position signal in response thereto; and
directing a beam from said base station to said mobile transceiver in response
8 to said received position signal.

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